

AMENDMENT

Please amend the application as indicated hereafter.

To the Claims:

Claim 1 (currently amended) An earphone structure, comprising:

a case;

a cover, mounted on an opening of the case, and defining a space together with the case;

a main speaker fixed on the cover, and adapted for generating a sound wave; and a plurality of sub-speakers, which are installed inside the case;

a composite chamber, wherein the sub-speakers are disposed on the composite chamber for forming a composite room, such that the sound wave generated by the sub-speakers forms a composite sound field, and the sound wave generated by the sub-speakers as well as the sound wave generated by the main speaker are propagated out of the earphone; and accommodated in the space defined by the case and the cover, and fixed on the cover, wherein the composite chamber defines a composite room together with the cover on which it is fixed; and

a plurality of sub-speakers fixed on sidewalls of the composite chamber for generating sound waves and mixing the generated sound waves in the composite chamber so as to configure a composite sound field in the composite room.

wherein the sound wave generated by the main speaker and the sound waves generated by the sub-speakers are propagated out of the earphone through the cover

~~a cover, wherein the cover and the case jointly cover the main speaker and the sub-speakers for forming the earphone structure.~~

Claim 2 (original) The earphone structure of claim 1, wherein the sub-speakers comprise a first channel speaker and a second channel speaker, which are disposed on two opposite sides of the composite chamber.

Claim 3 (original) The earphone structure of claim 2, wherein a position where the first channel speaker is disposed at and a position where the second channel speaker is disposed at are not symmetrical.

Claim 4 (original) The earphone structure of claim 2, wherein the sub-speakers further comprises a subwoofer speaker.

Claim 5 (original) The earphone structure of claim 4, wherein the subwoofer speaker is disposed on a back side of the composite chamber.

Claim 6 (original) The earphone structure of claim 1, wherein the composite chamber is a hollow column.

Claims 7-15 (cancelled)

Claim 16 (original) The earphone structure of claim 1, wherein the earphone structure receives a signal which has been processed by a sound field simulation process for generating a simulation sound field by the sub-speakers and the main speaker inside the.

Claim 17 (original) The earphone structure of claim 16, wherein the sound field simulation process is designed based on a frequency-divided point of the sub-speakers.

Claim 18 (original) The earphone structure of claim 16, wherein the sound field simulation process is designed based on a frequency-divided point of the sub-speakers and a delay process.

Claims 19-54 (cancelled)

Claim 55 (currently amended) An earphone structure comprising a composite chamber and being disposed inside a space defined by a case and a cover, comprising a composite chamber defining a composite room therein, wherein the case and the cover jointly cover the composite chamber for forming the earphone structure, and the composite chamber receives a plurality of sound source signals from different directions and forms a composite room, such that a composite sound field is formed by the sound source signals in the composite room.

Claim 56 (original) The earphone structure of claim 55, wherein the sound source signals at least comprise a first sound source signal and a second sound source signal, which are originated at opposite sides of the composite chamber, respectively.

Claim 57 (original) The earphone structure of claim 56, wherein a location where the first sound source signal is originated at and a location where the second sound source signal is originated at on the opposite sides of the composite chamber are not symmetrical.

Claim 58 (original) The earphone structure of claim 56, wherein the sound source signals further comprise at least a subwoofer sound source signal.

Claim 59 (original) The earphone structure of claim 58, wherein the subwoofer sound source signal is originated at a back side of the composite chamber.

Claim 60 (original) The earphone structure of claim 55, wherein the sound source signals are the signals which have been processed by a sound field simulation process for generating a simulation sound field in the composite chamber.

Claim 61 (original) The earphone structure of claim 60, wherein the sound field simulation process is designed based on a frequency-divided point of the sound source signals.

Claim 62 (original) The earphone structure of claim 60, wherein the sound field simulation process is designed based on a frequency-divided point of the sound source signals and a delay process.

Claim 63 (currently amended) An earphone structure ~~comprising a composite chamber and being installed inside a space defined by~~ a case and a cover, comprising a composite chamber defining a composite room therein, wherein the case and the cover jointly cover the composite chamber for forming the earphone structure, and the composite chamber receives a plurality of sound source entities from different directions and forms a composite room, such that a composite sound field is formed by the sound source entities in the composite room.

Claim 64 (currently amended) The earphone structure of claim [[55]]63, wherein the sound source entities at least comprise a first sound source signal and a second sound source signal, which are originated at both opposite sides of the composite chamber, respectively.

Claim 65 (original) The earphone structure of claim 64, wherein a position where the first sound source entity is originated at and a position where the second sound source entity is originated at both opposite sides of the composite chamber are not symmetrical.

Claim 66 (original) The earphone structure of claim 64, wherein the sound source entities further comprise at least a subwoofer sound source entity.

Claim 67 (original) The earphone structure of claim 66, wherein the subwoofer sound source entity is originated at a back side of the composite chamber.

Claim 68 (original) The earphone structure of claim 63, wherein the sound source entities are the signals which have been processed by a sound field simulation process for generating a simulation sound field in the composite chamber.

Claim 69 (original) The earphone structure of claim 68, wherein the sound field simulation process is designed based on a frequency-divided point of the sound source entities.

Claim 70 (original) The earphone structure of claim 68, wherein the sound field simulation process is designed based on a frequency-divided point of the sound source entities and a delay process.